

Hardware

User Manual

Important safety information

PLEASE READ CAREFULLY BEFORE INSTALLING PRODUCT IN VEHICLE

	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
 WARNING	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
 CAUTION	CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
CAUTION	CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.



Removing original equipment, adding accessories or modifying your vehicle could affect the vehicle's safety or make it illegal to operate in some jurisdictions.

Follow all product instructions and all instructions in your vehicle owner's manual regarding accessories or modifications.

Consult your country's and/or state's laws regarding operation of a vehicle with any accessories or modifications.

It is your sole responsibility to place, secure and use your Mio in a manner that will not cause accidents, personal injury or property damage. Always observe safe driving practices.

Do not mount your Mio in a way that may interfere with the safe operation of the vehicle, the deployment of air bags or other safety equipment.

Do not operate your Mio while driving.

Before you use your Mio for the first time, familiarize yourself with your device and its operation.

On main roads, the distance to an exit calculated by the Mio may be further than the distance shown on road signs. Road signs show the distance to the start of an exit while the Mio shows the distance to the next intersection, i.e., the end of the exit ramp or road. To prepare to exit a road, always follow distance information on road signs.

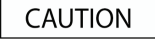
The use of information regarding safety or speed camera locations may be subject to local laws in the country of use. You are responsible for checking that you can legally use the information in your country or in the country where the information will be used.

The TV, video player and AV input features **MUST NOT** be used when driving. Using this feature may cause an accident. Please make sure you comply with this warning. Mio accepts NO liability whatsoever in this regard.



Do not handle the Mio while it is hot. Let the product cool, out of direct sunlight.

At full power, prolonged listening to the Mio via headphones or earphones can damage the ear of the user.



Do not expose the Mio to direct sunlight in an unattended vehicle for prolonged periods. Overheating may damage the unit.

To discourage theft, do not leave the Mio, mounting bracket or any cables in plain view in an unattended vehicle.

Warning Notice to Drivers in the United States

State law may prohibit drivers in states such as Arizona, California and Minnesota from mounting objects on their windshields while driving. Please make sure you research and follow your most current State laws. An alternative mounting option is provided in the box with your product; also, stores offer additional mounting alternatives. Mio does not take any responsibility for any fines, penalties, or damages that may be incurred as a result of disregarding this notice.

Home charger-specific safety information



To charge your Mio from the mains power, use the home charger (Model: MII050100; Input: 100-240V AC 50-60Hz; Output: 5V DC 1A Max) supplied by Mio as an accessory (may be sold separately). Using other home chargers with your Mio could result in serious injury or property damage.

Never use the charger if the plug or cord are damaged.

Do not expose the charger to moisture or water. Do not use the charger in a high moisture environment. Exposure to water may cause electrical sparks or fires.

Never touch the charger when your hands or feet are wet.

Allow adequate ventilation around the charger when using it to operate your Mio or charge the Mio internal battery. Do not cover the charger with paper or other objects that will reduce ventilation. Do not use the charger while it is inside a carrying case or other container.

Ensure that the charger is connected to a power source with the correct fitting and voltage requirements. The voltage requirements can be found on the home charger casing and/or packaging.

Do not attempt to service the charger as this could result in personal injury. Replace the charger if it is damaged or exposed to excess moisture.

Internal battery-specific safety information



Your Mio contains a non-replaceable internal lithium-ion polymer battery. The battery may burst or explode if mishandled, releasing hazardous chemicals. To reduce the risk of fire or burns, do not disassemble, crush or puncture the battery.

Recycle or dispose of the battery safely and properly according to local laws and regulations. Do not dispose of the battery in fire or water.



Only use the correct home charger (sold separately) or in-car charger supplied by Mio to charge the Mio internal battery.

Only use the Mio internal battery with the Mio unit.

The Mio battery will stop charging when the ambient temperature is less than 0°C (32°F) or more than 45°C (113°F).

About charging

- Use only the charger supplied with your device. Use of another type of charger will result in malfunction and/or danger.
- This product is intended to be supplied by a LISTED Power Unit marked with "LPS", "Limited Power Source" and output rated + 5 V dc / 1.0 A".
- Use a specified battery in the equipment.

About the charger

- Do not use the charger in a high moisture environment. Never touch the charger when your hands or feet are wet.
- Allow adequate ventilation around the charger when using it to operate the device or charge the battery. Do not cover the charger with paper or other objects that will reduce cooling. Do not use the charger while it is inside a carrying case.
- Connect the charger to a proper power source. The voltage requirements are found on the product case and/or packaging.
- Do not use the charger if the cord becomes damaged.
- Do not attempt to service the unit. There are no serviceable parts inside. Replace the unit if it is damaged or exposed to excess moisture.

About the battery

- Use a specified battery in the equipment.

Important instructions (for service personnel only)

- **Caution:** Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.
- Replace only with the same or equivalent type recommended by the manufacturer.
- The battery must be recycled or disposed of properly.
- Use the battery only in the specified equipment.

Failure to adhere to these warnings and cautions may lead to death, serious injury or property damage. Mio disclaims all liability for installation or use of the Mio that causes or contributes to death, injury or property damage or that violates any law.

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Welcome

Thank you for purchasing this Mio. Please read this manual carefully before using your Mio for the first time. Keep this manual in a safe place and use as your first point of reference.

Important information for using the manual

It is important to understand the terms and typographical conventions used in this manual.

Formatting

The following formatting in the text identifies special information:

Convention	Type of Information
Bold	Components or items displayed on screen, including buttons, headings, field names and options.
<i>Italics</i>	Indicates the name of a screen.

Icons

The following icons are used throughout this manual:

Icon	Description
	Note
	Tip
	Warning

Terms

The following terms are used throughout this manual to describe user actions.

Term	Description
Press	Press and release a button quickly.
Press and hold	Press and hold a button for 2-3 seconds.
Tap	Press and release an item displayed on the touch screen.
Tap and hold	Tap and hold an item displayed on the touch screen for 2-3 seconds.
Select	Tap an item in a list or tap a command from a menu.

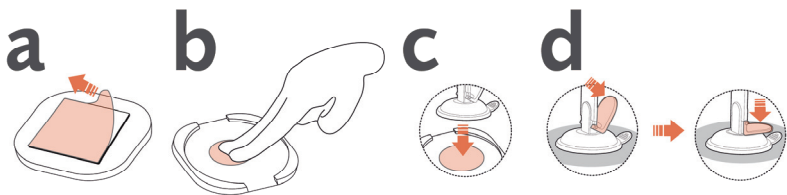
Mounting your Mio in a vehicle

CAUTION:

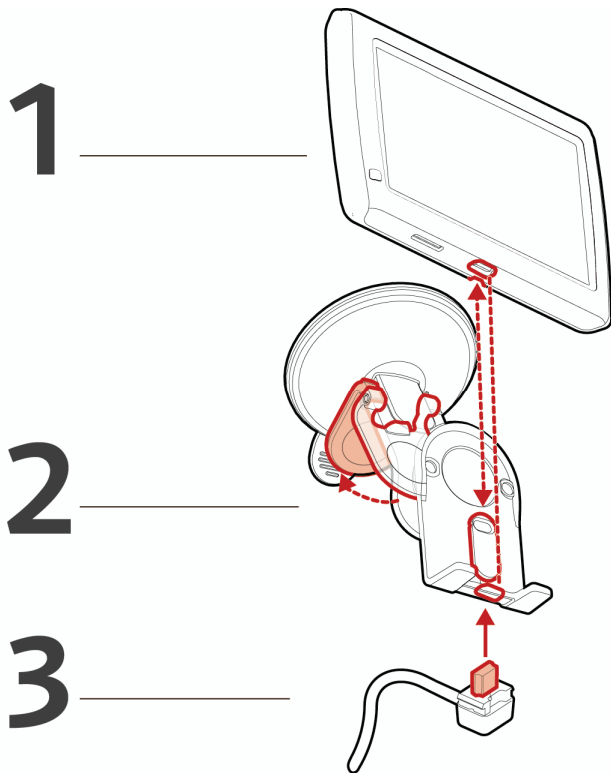
- Never mount your Mio where the driver's field of vision is blocked.
- If the windshield is tinted with a reflective coating, it may be athermic and impact the GPS reception. In this instance, please mount your Mio where there is a "clear area".
- To protect your Mio against sudden surges in current, connect the in-car charger only after the car engine has been started.

If you are driving in Arizona, California and Minnesota, you should NOT have the Mio mounted to your windshield. Instead you should use the enclosed mounting disc to attach the Mio to your dashboard.

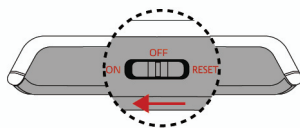
 **WARNING** This is a permanent solution - the adhesive tape on the bottom of the mounting disc cannot be removed once fixed to your dashboard.



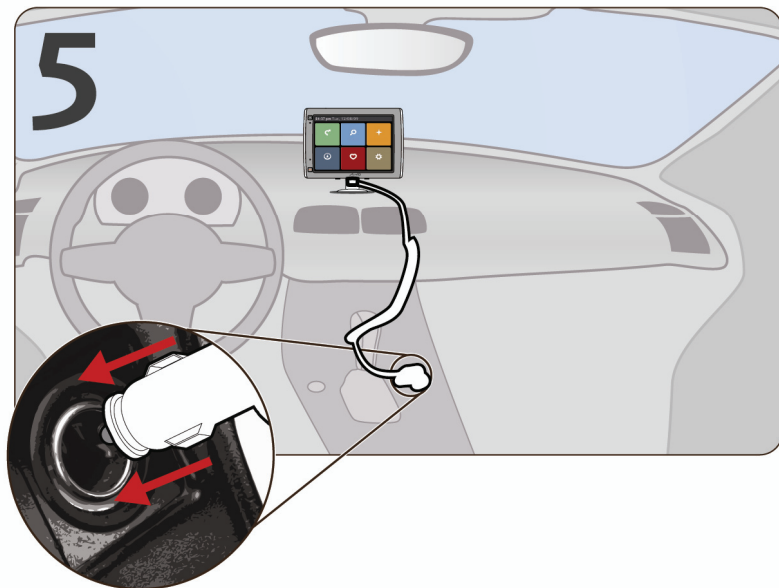
S300 Series/S400 Series



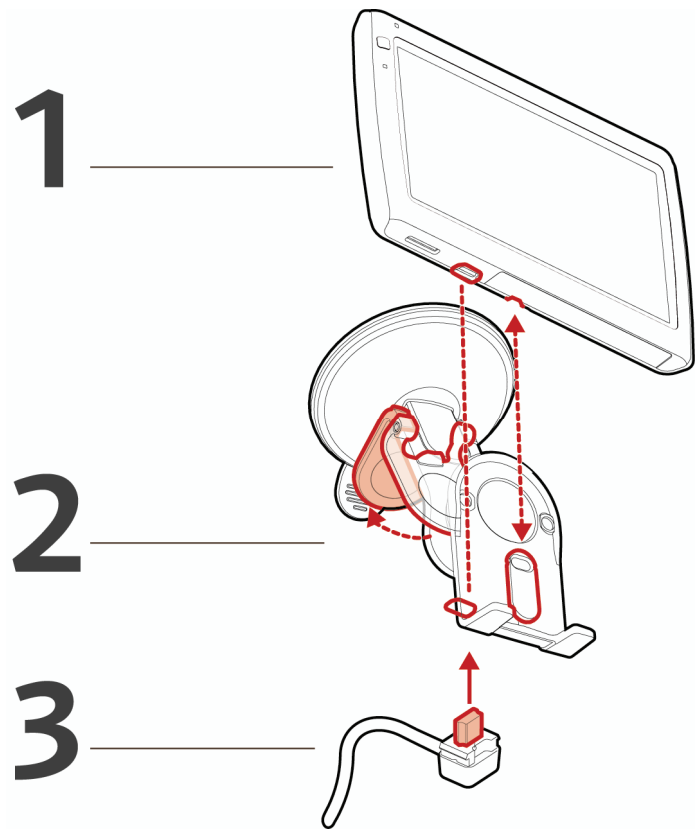
4



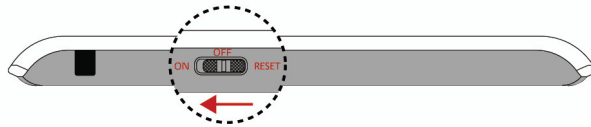
5



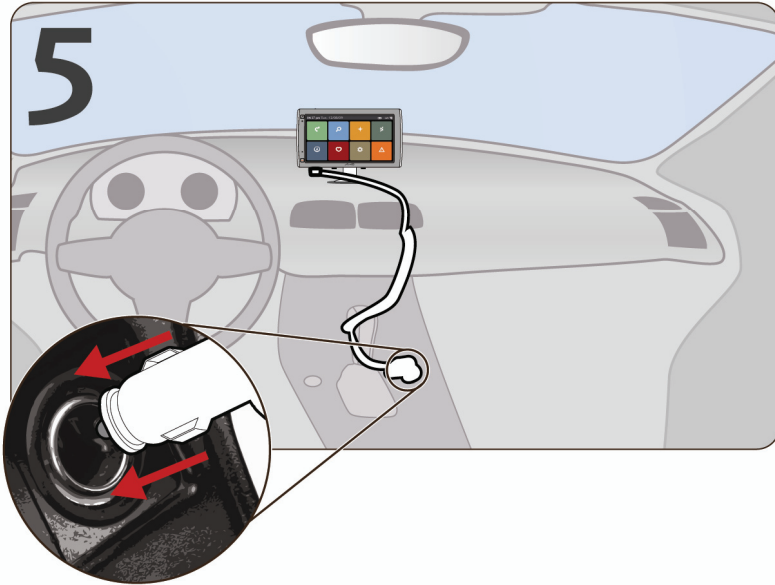
S500 Series



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Enabling Traffic Reception

Traffic information is not available on all models and is only available in selected countries.

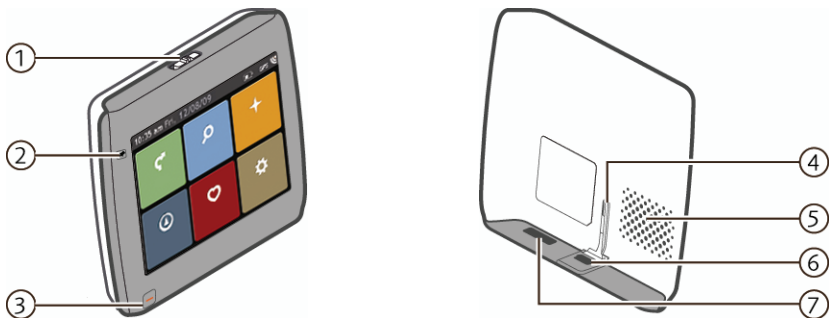
Depending on the model, your Mio can receive live traffic information via the Traffic Message Channel (TMC) service.

- If your Mio has a built-in TMC receiver, you can receive live traffic information via the in-car charger which is used as an antenna.
- If your Mio does not have a built-in TMC receiver, you will need to install either the TMC accessory kit (may be sold separately)

For information on using traffic information on your Mio, see the *Software User Manual*.

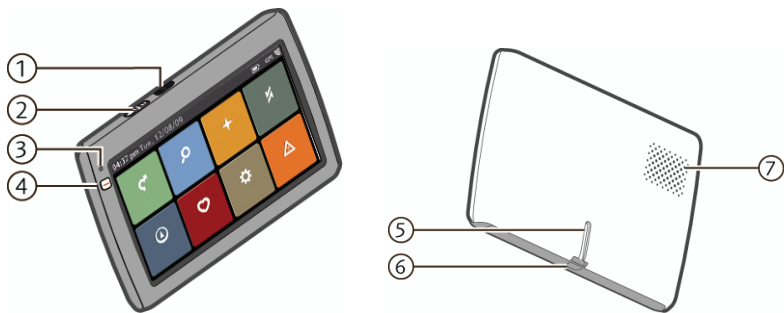
Getting to know your Mio

S300 Series



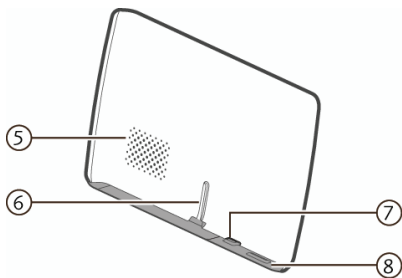
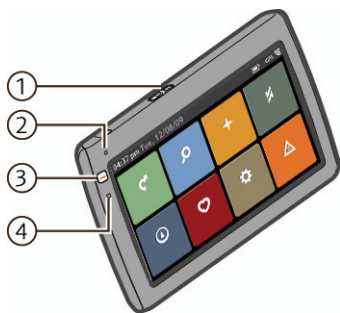
- | | |
|---------------------|---|
| ① Power switch | ④ Cradle slot |
| ② Battery indicator | ⑤ Speaker |
| ③ Main Menu button | ⑥ Socket for in-car charger, USB cable, home charger (sold separately) and TMC accessory kit (may be sold separately) |
| | ⑦ Slot for microSD™ memory card |

S400 Series



- | | |
|---------------------------------|---|
| ① Slot for microSD™ memory card | ⑤ Cradle slot |
| ② Power switch | ⑥ Socket for in-car charger, USB cable, home charger (sold separately) and TMC accessory kit (may be sold separately) |
| ③ Battery indicator | ⑦ Speaker |
| ④ Main Menu button | |

S500 Series



① Power switch

② Microphone

 The microphone is not included on all models.

③ Main Menu button

④ Battery indicator

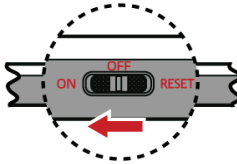
⑤ Speaker

⑥ Cradle slot

⑦ Socket for in-car charger, USB cable, home charger (sold separately) and TMC accessory kit (may be sold separately)

⑧ Slot for microSD™ memory card

How do I turn on my Mio?



- To turn on your Mio, slide the power switch to the **ON** position.
- To turn off your Mio, slide the power switch to the **OFF** position, then tap **Off**. Your Mio will enter a suspended state. When you next turn it on, your Mio will return to the last screen that you used.
- To reset your Mio, slide the power switch to the **RESET** position. When your Mio has turned off, slide the power switch to the **ON** position.
- To lock the screen, slide the power switch to the **OFF** position, then tap **Lock**.
 - To unlock the screen, slide the power switch to the **ON** position, then tap **Unlock**

How do I charge the battery?

Your Mio has an internal battery that when fully charged, should provide power for up to 2 hours. The battery can take up to 4 hours to fully charge.

 The battery may not be fully charged when you use your Mio for the first time.

CAUTION: For optimal performance of the battery, note the following:

- Do not charge the battery when the temperature is high (e.g. in direct sunlight).
- There is no need to fully discharge the battery before charging.
- When storing your Mio for a long period of time, be sure to fully charge the battery at least once every two weeks.

The battery indicator light on the Mio indicates the level of internal battery charge:

- **Green** - battery full
- **Orange** - battery charging

How do I charge the battery in a vehicle?

To charge your Mio in a vehicle, plug the in-car charger into  on the bottom of your Mio and the other end into the vehicle power socket.

How do I charge the battery via my computer?

 For optimal charging results, ensure that your Mio is turned off while connected to your computer.

1. Turn on your computer.
2. Plug the large end of the USB cable directly into a USB port on your computer (not a USB hub) and plug the small end into  on the bottom of your Mio.

CAUTION: When your Mio is turned on and connected to a computer, it is recognized as an external mass-storage device. Do NOT delete any files that are pre-installed on your Mio. Deleting the files can cause your Mio to crash

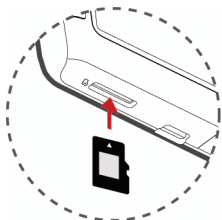
How do I charge the battery at home or work?

To charge your Mio using a mains power socket, plug the home charger cable into  on the bottom of the Mio and the mains power charger power pack into the power socket.

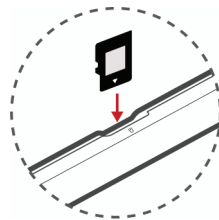
 The home charger is not included with all models and may be purchased separately (see www.mio.com for details).

How do I insert a memory card?

CAUTION: Do not apply pressure to the center of the memory card.



S300 Series/S500 Series



S400 Series

Hold the microSD™ card by the edges and gently insert it into the slot with the label facing the front of the Mio.

- To remove a card, gently push the top edge of the card inwards to release it, then pull it out of the slot.

Other features

How do I capture a location or a journey?

The capture functionality is not available on all models.

Your Mio has a capture feature which allows you to record GPS co-ordinates of a location, capture a location with a voice recording and capture a journey and save them so you can navigate back at a later time.

You can capture the GPS co-ordinates of your location by pressing .

 The capture feature is only available if your Mio has a GPS fix.

- For information about capture, refer to the *Software User Manual*.

How do I make a hands-free call?

Hands-free calling is not available on all models.

If you have a mobile phone with Bluetooth wireless technology, you can use your Mio as a hands-free car kit. Before you can use this feature you must pair your mobile phone with your Mio.

 Ensure that the *Bluetooth* wireless feature of your mobile phone is turned on before you begin pairing. Not all phones with Bluetooth wireless technology are compatible with your Mio. For a list of compatible phones, visit www.mio.com

- For information about pairing, making and receiving phone calls, refer to the *Software User Manual*.

How do I receive current traffic information?

Traffic information is not available on all models and is only available in selected countries.

You can receive current traffic information on your Mio using the Traffic Message Channel (TMC) service or using MSN Direct. Depending on your Mio model you may require a TMC accessory kit (may be sold separately).

- For more information about Traffic, refer to the *Software User Manual*.

How do I play music?

Music is not available on all models and is only available in selected countries.

Using Media you can play music or video files that you have downloaded to your Navman, or from your microSD™ card.

- For more information about playing music, refer to the *Software User Manual*.

How do I receive audio through my vehicle speakers?

FM transmitting is not available on all models. And is only available in selected countries.

Your Navman can be set to transmit sound at a particular FM frequency which you can then receive through your vehicle radio. This means that you can hear map voice guidance, radio, mp3 files and video voice files clearly and loudly through your vehicle speakers.

- For more information about FM transmitting, refer to the *Software User Manual*.

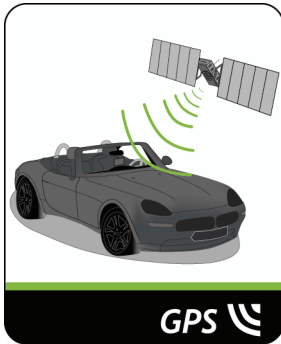
Reference

What is GPS?

The Global Positioning System (GPS) is available at any time, free of charge, and is accurate to within 15ft (5m). GPS navigation is made possible by a network of satellites that orbit the Earth at around 12,552mi (20,200km). Each satellite transmits a range of signals which are utilized by GPS receivers, such as your Mio, to determine an exact location. Although a GPS receiver can detect signals from up to 12 satellites at any time, only four signals are required to provide a position or "GPS fix" (latitude and longitude), for vehicle navigation systems.

How does my Mio receive GPS signals?

Your Mio receives GPS signals via the internal GPS antenna. To guarantee the optimum GPS signal strength, ensure your Mio is outdoors, or in a vehicle outdoors, and has an unobstructed view of the sky. GPS reception is not usually affected by weather, however, very heavy rain or snow may have a negative effect on your reception.



Caring for your Mio

Taking good care of your Mio will ensure trouble-free operation and reduce the risk of damage to your Mio:

- Keep your Mio away from excessive moisture and extreme temperatures.
- Avoid exposing your Mio to direct sunlight or strong ultraviolet light for extended periods of time.
- Do not place anything on top of your Mio or drop objects on your Mio.
- Do not drop your Mio or subject it to severe shock.
- Do not subject your Mio to sudden and severe temperature changes. This could cause moisture condensation inside the unit, which could damage your Mio. In the event of moisture condensation, allow the Mio to dry out completely before use.
- The screen surface can easily be scratched. Avoid touching it with sharp objects. Non-adhesive generic screen protectors designed specifically for use on portable devices with LCD panels may be used to help protect the screen from minor scratches.
- Never clean your Mio when it is turned on. Use a soft, lint-free cloth to wipe the screen and the exterior of your Mio.
- Do not use paper towels to clean the screen.
- Never attempt to disassemble, repair or make any modifications to your Mio. Disassembly, modification or any attempt at repair could cause damage to your Mio and even bodily injury or property damage and will void any warranty.
- Do not store or carry flammable liquids, gases or explosive materials in the same compartment as your Mio, its parts or accessories.

Troubleshooting

If you encounter a problem you cannot solve, contact an authorized service center for assistance.

Problems	Solutions
Power does not turn on when using battery power.	The remaining battery power may be too low to operate your Mio. Charge the battery using the in-car charger, home charger (sold separately) or USB cable, then try again.
Screen responds slowly.	The remaining battery power may be too low to operate your Mio. If the problem still persists, reset your Mio.
Screen freezes.	Reset your Mio.
Screen is hard to read.	Increase the screen brightness.
Cannot establish a connection with a computer.	Ensure that your Mio and your computer are both turned on before trying to establish a connection. Make sure that the cable is securely plugged into the USB port on your computer and on the Mio. Connect the USB cable directly to your computer, not a USB hub. Reset your Mio before connecting the USB cable. Always disconnect your Mio before you restart your computer.

For more information

User Manuals

The User Manuals can be downloaded from the Mio website: www.mio.com

Online support

For 24/7 help and support with Mio products, visit our Technical Support website at: service.mio.com

Disclaimer

Mio operates a policy of ongoing development. Mio reserves the right to make changes and improvements to any of the products described in this document without prior notice. Mio does not warrant that this document is error-free. The screenshots and other presentations shown in this manual may differ from the actual screens and presentations generated by the actual product. All such differences are minor and the actual product will deliver the described functionality as presented in this User Manual in all material respects.

Compliance



WARNING This product, its packaging and its components contain chemicals known to the State of California to cause cancer, birth defects or reproductive harm. This Notice is being provided in accordance with California's Proposition 65.



For regulatory identification purposes:

- Moov Spirit 300 Series is assigned a model number of N223.
- Moov Spirit 500 Series is assigned a model number of N224.
- Moov Flat Spirit 500 Series is assigned a model number of N229.
- Moov Spirit 401 Series is assigned a model number of N245.
- Moov Spirit 501 Series is assigned a model number of N244.

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

Marking labels located on the exterior of your Mio indicate the regulations that your model complies with. Please check the marking labels on your Mio and refer to the corresponding statements in this chapter. Some notices apply to specific models only.



Federal Communications Commission radio frequency interference statement

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

FCC RF Radiation Exposure Statement

- This transmitter must not be co-location or operating in conjunction with any other antenna or transmitter.
- This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.
- This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body

Canada 310

This Class B digital apparatus complies with Canada ICES-003. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment.

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device



Products with the CE marking comply with Radio & Telecommunication Terminal Equipment Directive (R&TTE) (1999/5/EC), the Electromagnetic Compatibility Directive (2004/108/EC) and the Low Voltage Directive (2006/95/EC) - issued by the Commission of the European Community. Compliance with these directives implies conformity to the following European Standards:

EN 301 489-1: Electronic compatibility and Radio spectrum Matters (ERM), Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements.

EN 301 489-9: (Bluetooth) (FM Transmitter): Electromagnetic compatibility and Radio spectrum Matters (ERM), ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 9: Specific conditions for wireless microphones, similar Radio Frequency (RF) audio link equipment, cordless audio and in-ear monitoring devices.

EN 301 489-17: Electronic compatibility and Radio spectrum Matters (ERM), Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2.4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment.

EN 300 328 (Bluetooth): Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2.4 GHz ISM band and using spread spectrum modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive

EN 301 357: Electronic compatibility and Radio spectrum Matters (ERM), Cordless audio device in the Range 25 MHz to 2000 MHz; Part 1: Technical characteristics and test methods.

L'utilisation de cet appareil n'est pas autorisée en France" or when the FM transmission is only one of several functions : « La Fonction de transmission FM n'étant pas autorisée en France, elle doit rester désactivée »

EN 55022: Radio disturbance characteristics

EN 55024: Immunity characteristics

EN 61000-3-2: Limits for harmonic current emissions

EN 61000-3-3: Limitation of voltage fluctuation and flicker in low-voltage supply system

IEC 60950-1:2001: Product Safety

The manufacturer cannot be held responsible for modifications made by the User and the consequences thereof, which may alter the conformity of the product with the CE Marking.

Declaration of Conformity

Hereby, Mio Technology Limited declares that this N223/N224/N229/N244/N245 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

The software is based in part on the work of the Independent JPEG Group.

The software application uses modified versions of the Minimal XML Library, Flickr Library and Python Library. The libraries and their use are covered by the GNU Lesser General Public License (www.gnu.org/licenses/lgpl.html). The modified source code is available from the following URLs:

- Minimal XML Library: <http://download.mio.com/opnsources/gnu/mxml.zip>
- Flickr Library: <http://download.mio.com/opnsources/gnu/FlickrNet.zip>
- Python Library: <http://download.mio.com/opnsources/gnu/python25.zip>



Bluetooth QD ID B015153 (S500 Series)

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